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Examiner's Detailed Office Action

1.   This Office Action is responsive to communication filed on September 29th, 2009;

in responding to a restriction requirement on September 24th, 2009,

Claims 1 – 14, 17 – 23 and 25 – 27 are presented;

Claims 1 – 14, 25 and 26 have been elected for further examination;

Claims 17 – 23 and 27 are non-elected claims with traverse;

Claims 15, 16 and 24 had been cancelled in prior amendments.

Election/Restrictions

2.   Claims 17 – 23 and 27 are withdrawn from further consideration pursuant to 37 CFR

1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking

claim. Applicant timely traversed the restriction (election) requirement in the reply filed on

September 29th, 2009.

Response to Arguments

Election/Restrictions

3.   Applicant's election with traverse of the restriction requirement in the reply filed on

September 24th, 2009 is acknowledged. The traversal is on the ground(s) that:

Applicants traverse the restriction requirement on the basis that unity of invention exists

among the groups of claims identified in the restriction requirement. This application is the

national phase of PCT/IB2004/004177. Therefore, unity of invention rules apply to the

application. Under unity of invention rules, groups of claims directed to more than one invention

are permitted in an application. Applicants direct the Examiner's attention to 37 C.F.R. § 1.475

and M.P.E.P. § 1850 for a discussion of unity of invention. Applicants respectfully request

withdrawal of the restriction requirement and examination of all claims.

This is not found persuasive because current application is applying for an U.S. Patent,

not under PCT application searching herein; further, the restricted claims having been amended

to more distinctive to each other, are not the same claims as searched in PCT application; further

more, current claims should be restricted based on 37 CFR 1.475 (b) (1) - (5).

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

4.   Forth objections have been withdrawn in response to the corresponding amendments and

elections.

Claim Rejections - 35 USC § 112

5.   Forth 112 rejections have been withdrawn in current office action responsive to the

corresponding amendments and elections.

Claim Rejections - 35 USC § 102

6.   Applicants' arguments regarding "**Spriggs** does not disclose linking an event or alarm

with an action to be taken and automatically taking the action and automatically generating the

human-machine interface" which is respectfully disagreed. First, it is not as claimed in the

claims; further, it is not clear defined regarding the term "automatically generating", therefore, it

is not limited to "alarm or event triggering and activating the creation of the linking, the acting or

the HMI" as argued, detail can be found in the rejections below.

7.   Regarding arguments to the rejections for non-elected claims 17 – 23 and 27 will not be

responded herein.

Claim Rejections - 35 USC § 102

        The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the
basis for the rejections under this section made in this Office action:

        A person shall be entitled to a patent unless –
        (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
        sale in this country, more than one year prior to the date of application for patent in the United States.

8.   **Claim(s) 1 – 6, 12 – 14** and **25 – 26** is/are rejected under 35 U.S.C. 102(b) as being

anticipated by Bob Spriggs et al. (U.S. Patent No. 6,421,571, and referred to as **Spriggs**

hereinafter).

        Regarding **claim(s) 1, 13** and **14, Spriggs** discloses:

▪   A method in an industrial safety system for controlling a process or equipment controlled by

    an industrial control system in an industrial facility, [an industrial plant asset management

    system ... for providing an environment for development and deployment of visual models

    for monitoring plant assets, Abstract; Data exporter modules 300 are interfaces that allow the

    system 10 to communicate with control and automation systems including third party control

    and automation systems, col. 6, lines 62 – 65]

- the industrial safety system comprises components with safety devices, [a variety of device dependent data collector modules with associated signal conditioning and processing devices for providing an environment for development and deployment of visual models, for monitoring plant assets, Abstract; for protecting and managing industrial plant assets including a multifarious grouping of machinery and processes, Col. 1, lines 6 – 11; … including data acquisition devices, col. 17, lines 11 – 18] wherein

- the safety system enables signals to be generated as a result of an event or alarm **related** to the process or equipment, [basis maintenance activities on specific alarms, machinery fault identification, col. 4, lines 31 – 37; a display device coupled to said processing device for providing a graphical user interface to a user in response to receipt of signals from said processing device, col. 32, lines 32 – 35] the method comprising:

- automatically creating a link between the event or alarm and an action to be taken upon receipt of said event or alarm signal due to the event, automatically generating a control signal for the safety system to initiate the action to be taken in the industrial safety system. [point repository module then adjust the status on the points if an alarm is detected … then reports this status change to the historical/machine database and to any clients requesting it, col. 9, lines 59 – 67; Event Manager 132 further allows the user to launch plots via menu 266 from the event manager view 262 to present supporting evidence for any given event, col. 20, lines 42 – 45; fig. 13, a listing of all events associated with the system 10 for the specified time frame can be quickly accessed. Events include alarms, diagnostic statuses, asset events (such as start up shutdown), and configuration events. As with all other system 10 displays, the views are linked, col. 20, line 66 – col. 21, line 17; the examiner further explains,

"automatically generating" does not provide where the signal generation is from; further, the "log" in the event manager as shown in **Spriggs** reference, fig. 13, is a link and is created when alarm received; the 3rd event as listed in the fig. 13 has a menu (list) of "actions" (266) to be taken] and

- automatically generating a human machine interface comprising a representation of the **related** process or equipment and a representation of the event or alarm [...They then, off the selected item, can bring up a Bargraph, Event Manager (or any other object that support Navigation). These objects bring up their data from the currently navigated location. Now, if the object wants, it can then participate in "Real Time" or automatic navigation--where it then automatically navigates with the user as they navigate through the system, col. 16, lines 11 – 24; detail can be found in col. 15, line 36 – col. 17, line 57; again, it is not clear defined in the claim that what causes the "automatically generating", it can be treated as a user "click" then the system automatically generate a HMI as claimed]

Regarding **claim(s) 2**, **Spriggs** discloses the method according to claim 1, further comprising:

- configuring a representation of a safety device, [model the actual instruments installed in an enterprise and behaves as a graphical view of the instrument tree view 170, col. 16, lines 65 – 67; actual wiring of that instrument ... including data acquisition device, col. 17, lines 7 – 18; see further paragraphs under "Instrument View Object and Instrument View", col. 16, line 59 – col. 17, line 17] and

- configuring a representation of said event or alarm. [a color for each severity level, col. 11,

  line 4]

     Regarding **claim(s) 3**, **Spriggs** discloses the method according to claim 1, further

comprising:

- creating a schematic representation of the safety system comprising the components and the

  safety devices, [actual wiring of that instrument ... including data acquisition device, col. 17,

  lines 7 – 18] and

- creating a representation of each component. [fig. 7 – 14]

     Regarding **claim(s) 4**, **Spriggs** discloses the method according to claim 1, further

comprising:

- creating a representation of each safety device. [allows the user to see status, alarms, and

  configuration referenced from the instrumentation system including data acquisition devices

  60, col. 17, lines 11 – 14]

     Regarding **claim(s) 5**, **Spriggs** discloses the method according to claim 1, further

comprising:

- creating a representation of an input to a safety device, [The configuration module allows a

  user to configure, via the unified graphical user interface, an enterprise and associated

  physical assets including asset monitoring instrumentation, asset transducers/sensors and

  associated properties including alarming, col. 3, lines 6 – 15] and

- creating a representation of an output from the safety device. [fig. 13; the alarm can be a

    representation of an output from the safety device]

Regarding **claim(s) 6**, **Spriggs** discloses the method according to claim 1, further

comprising:

- creating a representation of each action, [Action Manager Module, col. 27, lines 60 – 64] and

- creating a representation of each event. [a color for each severity level, col. 11, line 4]

Regarding **claim(s) 12**, **Spriggs** discloses the method according to claim 2, wherein

- relations between the representations are displayed in the form of a matrix. [the table, fig. 13]

Regarding **claim(s) 14**, **Spriggs** discloses

- A computer program product, comprising a computer readable medium; and programming

    instructions recorded on the computer readable medium to control a computer or a computer

    process to make it perform a method in an industrial safety system for controlling a process

    or equipment [a data acquisition module, a display module, a database module, and utility

    modules. These modules can reside on a single computer, col. 2, lines 39 – 44] including

- creating an automated link between the event or alarm and an action to be taken upon receipt

    of said event or alarm signal due to the event, and generating a control signal to initiate the

    action. [fig. 13, a <u>listing of all events</u> associated with the system 10 for the specified time

    frame can <u>be quickly accessed</u>. Events include alarms, diagnostic statuses, asset events (such

    as start up shutdown), and configuration events. As with all other system 10 displays, the

views are linked, col. 20, line 66 – col. 21, line 17; the examiner further explains, the "log" in

the event manager as shown in **Spriggs** reference, fig. 13, is a link and is created when alarm

received; the 3rd event as listed in the fig. 13 has a menu (list) of "actions" (266) to be taken]

and

- generating a control signal to initiate the action. [Event Manager 132 further allows the user

  to launch plots via menu 266 from the event manager view 262 to present supporting

  evidence for any given event, col. 20, lines 42 – 45]

     Regarding **claim(s) 25**, **Spriggs** discloses

- a database, comprising: information to be used in a method in an industrial safety system for

  controlling a process or equipment, according to claim 1. [a common database structure, col.

  1, lines 6 – 11]

     Regarding **claim(s) 26**, **Spriggs** discloses

- a website, comprising: means to perform a method in an industrial safety system for

  controlling a process or equipment, according to claim 1. [client server architecture, col. 3,

  lines 25 – 30; the examiner further explains, based on specification, [0118], the "website"

  can be simply a client/server means to perform the method]

Claim Rejections - 35 USC § 103

       The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

       (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
       section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claim(s) 7 – 11 is/are rejected** under 35 U.S.C. 103(a) as being unpatentable over

Spriggs and in view of Keith Eldridge et al. (U.S. Patent No. 7,272,815, and referred to as

Eldridge hereinafter).

Regarding claim(s) 7,

Spriggs teaches the method in an industrial safety system for controlling a process or

equipment, [an industrial plant asset management system ... for providing an environment for

development and deployment of visual models for monitoring plant assets, Abstract]

Spriggs does not teach the link with all the paths together: "configuring one or more

links comprising a link between the event and the input, comprising a path between the input and

the safety device, a path between the safety device and output, and a path between the output and

the action";

Eldridge teaches configuring one or more links comprising a link between the event and

the input, comprising a path between the input and the safety device, a path between the safety

device and output, and a path between the output and the action [real-input, real-output, bad

alarm, fig. 12, parameter setting, fig. 11, see more detail in col. 25, lines 45 – 63, further see fig.

120 and col. 139, line 29 – col. 140, line 10 for corresponding descriptions] for the purpose of

providing configuring process, environmental, industrial and other control systems generate

and/or utilize models representing configurations of control systems and/or the systems

controlled by them [Abstract].

It would have been obvious to a person of ordinary skill in the art at the time of

applicant's invention to modify the teaching of **Spriggs** to include "configuring one or more

links comprising a link between the event and the input, comprising a path between the input and

the safety device, a path between the safety device and output, and a path between the output and

the action", for the purpose of providing configuring process, environmental, industrial and other

control systems generate and/or utilize models representing configurations of control systems

and/or the systems controlled by them [Abstract].

Regarding **claim(s) 8**, **Spriggs** discloses the method according to claim 7, further

comprising:

▪ displaying the link by means of a representation in a human machine interface. [fig. 13]

Regarding **claim(s) 9**, **Spriggs** discloses the method according to claim 7, further

comprising:

▪ displaying the link by means of a representation in a graphical user interface on a screen. [fig.
   13; therein since "link" is a GUI as defined in specification, **Spriggs** reference discloses
   several windows including pull down menu when action on the selected event in a table of a
   window (GUI)]

Regarding **claim(s) 10**, **Spriggs** discloses the method according to claim 7, wherein

- each path is represented by a table. [fig. 13; the examiner further explains, there is no "path" claimed in claim 1, a 112(2) rejection has been cited above for this reason; therefore, **Spriggs** discloses a table which includes plurality of events, actions and options as disclosed in fig. 13]

Regarding **claim(s) 11**, **Spriggs** discloses the method according to claim 10, wherein

- each table is displayed in a graphical user interface on a screen. [fig. 13; the examiner further explains, there is no "table" claimed in claim 1, a 112(2) rejection has been cited above for this reason; therefore, **Spriggs** discloses a table which includes plurality of events, actions and options as disclosed in fig. 13]

Conclusion

10.   Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence Information

11.   Any inquires concerning this communication or earlier communications from the

examiner should be directed to Sunray Chang, who may be reached Monday through Friday,

between 6:00 a.m. and 3:00 p.m. EST. or via telephone at (571) 272-3682 or facsimile

transmission (571) 273-3682 or email sunray.chang@uspto.gov.

If you need to send an Official facsimile transmission, please send it to (571) 273-8300.

If attempts to reach the examiner are unsuccessful in the regular office hour, the

Examiner's Supervisor, Albert Decady, may be reached at (571) 272-3819.

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Supervisory Patent Examiner, Art Unit 2121
October 26, 2009